GOVERNMENT OF INDIA
SCIENCE AND TECHNOLOGY
LOK SABHA

UNSTARRED QUESTION NO:684
ANSWERED ON:19.07.2017
Laboratory under CSIR
Vasava Shri Mansukhbhai Dhanjibhai

Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:

(a) whether the Government has set up any laboratory under CSIR in Gujarat;
(b) if so, the details thereof during the last three years and the total number of laboratories functioning in Gujarat as on date; and
(c) the outstanding works done by these laboratories till date in Gujarat during the last three years?

Answer

MINISTER OF STATE FOR SCIENCE AND TECHNOLOGY AND EARTH SCIENCES

(SHRI Y. S. CHOWDARY)
(a) Yes, Madam.

(b) CSIR has established one laboratory in Gujarat. CSIR-Central Salt & Marine Chemicals Research Institute (CSMCRI) was set-up in Bhavnagar, Gujarat in April, 1954. No new lab has been established in last 3 years.

(c) The significant work carried out by CSIR-CSMCRI is attached at Annexure-1.

Annexure-1
Significant Achievements of CSIR-CSMCRI
a) Societal interventions:

(i) The commercial cultivation of Kappaphycus (seaweed) in Tamil Nadu has fueled the rural economy and agricultural productivity. The approximate number of beneficiaries (mostly women in coastal fishermen communities) is given below:

2014-15 200
2015-16 250
2016-17 325

(ii) CSIR-CSMCRI deployed it's indigenously developed "mobile water purification unit" in worst-ever draught affected Latur city (Marathwada region) for providing safe and clean water for drinking purposes. Around 40,000-50,000 litres per day clean drinking water was distributed to the locals for 10 days. Approximately, 2500 people per day were benefitted from this intervention. The RO bus was stationed at "Gorakshan" well in the heart of city and potable water of 104-150 ppm was made available to the people.

(iii) CSIR-CSMCRI's scientific interventions in solar salt works in Rajasthan and Gujarat have helped in quality and yield improvement of the solar salt. Regular trainings and capacity building programs have been conducted in these states and the approximate number of beneficiaries (year-wise) is given below:

Year Rajasthan Gujarat
2014-15 30 50
2015-16 30 50
2016-17 70 60

b) Others Achievements:

â€¢ Established a model salt farm at Markannam in Tamil Nadu;
â€¢ Designed double fortified salt containing iron and iodine to fight against anemia and goitre;
â€¢ Installation of water purification units during Chennai floods;
â€¢ Improvement in quality and yield of solar salt for small scale salt manufacturers through scientific interventions in Didwana and Nawa of Rajasthan;
â€¢ Development of high performance solar distillation units for producing potable water in solar salt works;
â€¢ CSIR-CSMCRI has installed 1000 LPH capacity brackish water RO plant in mental health hospital cum rehabilitation centre at Ervadi Village, Ramanathapuram (Tamil Nadu). The plant is based on indigenously developed RO membrane technology to provide safe and clean drinking water; and
â€¢ More than 400 marginal salt producers were given trainings for high purity solar salt production in Rajasthan and Gujarat.

c) Technologies/Know-how transferred:

Sl. No. Title of Technology/Process Transferred to

1 Process of conversion and separation of sodium carbonate, potassium carbonate and potassium hydroxide from the spent water of isobutyl benzene plant as potassium nitrate, sodium nitrate and potassium perchlorate or potassium bitartrate as value added products M/s. Viral Alkalis Ltd, Mahad

2 Flat sheet ultrafiltration and thin film composite (TFC) reverse osmosis membrane and spiral module making technology M/s. Rinzai Hydratech Pvt. Ltd., Ahmedabad

3 Production of styrene oxide from styrene M/s. Asian Azoles Ltd., Vapi

4 Process for liquid seaweed fertilizer from brown algae − Sargassum M/s. Seaferte Industries, Ramanathapuram

5 Production of Styrene Oxide from Styrene M/s. Bharti Rasayan Udyog, Raipur

6 Hydrogenation of Styrene Oxide to 2-Phenyl Ethyl Alcohol M/s. Asian Azoles Ltd., Vapi

7 Improved household solar still with easy operation and maintenance and enhanced output M/s. Thermo SEP Engineering Pvt. Ltd., Ahmedabad

d) Patents (Filed): 41 Indian; 112 Foreign for 57 inventions;
Patents (Granted): 17 Indian; 117 Foreign for 75 inventions

e) Publications: 584 scientific papers with average impact factor of 3.47

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